

# Derrick Kyei

Software & AI Engineer

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## SUMMARY

Software Engineer with 5+ years of experience delivering cloud, data, and DevOps solutions at enterprise scale. Specialized in Azure DevOps, data engineering, and applied AI, with hands-on experience in modernizing legacy systems and deploying analytics pipelines. Currently pursuing an M.S. in Artificial Intelligence with a focus on production-ready ML solutions.

## EDUCATION:

### University of the Cumberlands

*Master of Science, Artificial Intelligence (GPA: 4.00)*

Williamsburg, KY

August 2025 – Expected August 2026

### The University of Georgia — Franklin College of Arts and Sciences

*Bachelor of Science, Computer Science (GPA: 3.58)*

Athens, GA

**Honors & Awards:** HOPE Scholarship Recipient

January 2018 - December 2019

### Georgia State University — Perimeter College

*Associate of Science, Computer Science (GPA: 3.79)*

Decatur, GA

**Honors & Awards:** Phi Theta Kappa Honor Society, National Society of Collegiate Scholars

January 2015 – December 2017

## CERTIFICATIONS:

Microsoft Azure Fundamentals (AZ-900)

## TECHNICAL SKILLS:

**Cloud & DevOps:** Microsoft Azure, Azure Devops, CI/CD Pipelines, Terraform, Powershell, Bash, Infrastructure as Code

**Data & AI:** PySpark, Databricks, Delta Lake, SQL, ETL Pipelines, TensorFlow Keras, Data Modeling

**Programming:** Java, Python, C#, Typescript, JavaScript, SQL

**Experience:** C#, C, C++, NodeJS, AngularJS, Bash/Shell Scripting, PowerShell Scripting, Terraform, TensorFlow Keras, CI/CD

**Tools & Platforms:** Git, Jira, REST APIs, Maven, Linux/Unix, Agile/Scrum

## PROFESSIONAL EXPERIENCE:

### Databricks

*Senior Software Engineer - AT&T Inc.*

Alpharetta, GA

January 2023 – March 2024

- Developed and maintained PySpark ETL pipelines in Databricks to process multi-source datasets, improving data reliability and enabling analytics and AI workloads. Automated extract, transform, and load processes to enhance data processing efficiency and reliability.
- Implemented medallion architecture (bronze, silver, gold) using Delta Lake to incrementally improve data quality and governance.
- Designed CI/CD pipelines for Databricks notebooks and schema migrations, reducing deployment errors and improving data freshness.
- Estimated cluster sizing, monitored performance, and resolved Spark job failures to maintain stable production workloads.

### Azure DevOps

*Senior Specialist Software Engineer - AT&T Inc.*

Alpharetta, GA

November 2021 – December 2022

- Built and automated CI/CD pipelines supporting enterprise applications, improving deployment consistency and release velocity.
- Designed Azure infrastructure using Terraform, implementing infrastructure-as-code and auto-scaling configurations.
- Supported secure application deployments by integrating Azure Key Vault for secrets management.
- Collaborated in Agile/DevOps teams to support build, test, and release automation across multiple environments.

## **HR Technology**

*Software Engineer - AT&T Inc.*

**Atlanta, GA**

March 2021 - November 2021

- Modernized legacy applications by migrating ColdFusion systems to Angular, TypeScript, and Node.js hosted in cloud environments.
- Migrated governance-focused HR applications to AWS, supporting secure tracking and storage of sensitive data disclosures.

## **Project Atlas**

*Software Engineer - AT&T Inc.*

**Atlanta, GA**

January 2020 - March 2021

- Developed full-stack web applications used by field technicians, delivering enhancements, bug fixes, and new features.
- Demonstrated solutions to stakeholders, contributing to cost savings and improved operational efficiency.

## **TDP App**

*Software Engineer Intern - AT&T Inc.*

**Atlanta, GA**

June 2019 - August 2019

- Used AngularJS and NodeJS to develop a full-stack social communication app for TDP, which helped increase communication, collaboration, and grow individual networks.
- Used C# and Agile development with an intern innovation challenge team to develop a virtual reality app that leveraged 5G technology to tackle the issue of customer churn to help increase sales and improve customer service by anticipating needs and interests.

## **LEADERSHIP:**

### **Diversity, Equity & Inclusion**

- Supported Diversity, Equity & Inclusion initiatives at AT&T by assisting with event planning and internal communications.

## **PROJECTS:**

### **Word Embedding**

- Built and trained word embedding skip-gram models using TensorFlow/Keras, applying negative sampling and tf.data pipelines for efficient training.
- Preprocessed Shakespeare and IMDB-like corpora with Keras text utilities (tokenization, vocabulary construction, batching) to generate training pairs. Evaluated embeddings on downstream sentiment classification, achieving ~68% test accuracy, demonstrating transfer learning competence.

### **Building GAN**

- Designed and implemented a Generative Adversarial Network (GAN) in TensorFlow/Keras to generate realistic handwritten digits from the MNIST dataset.
- Explored variational autoencoder (VAE) reconstruction of MNIST digits, interpreting latent space organization and dimensionality reduction.

### **Fertilizer App**

- Used React Native to create an IOS and Android mobile application that allowed users to use their mobile devices to make quick calculations.
- Conducted user testing on the application and incorporated the results into the direction of the project.

### **Messenger App**

- Used Java to create a full-stack native mobile Android application leveraging Firebase Cloud technology to develop an SMS application.
- Conducted user testing and incorporated results into the direction of the project.

### **Movie Rating Prediction Application**

- Used Java and SQL to pull in existing data from IMDB database to find the best fit regression model to accurately predict genre ratings.

### **Project Intercept**

- Attended Goodie Nation's Hackathon to focus on producing startups to reduce violence by 40% by the year 2020 locally and globally.
- Team developed a web-based communications platform to produce services to survivors of human trafficking.